Where did the Neighbourhood Go?

A Look Into The Spatial Distributions of Student Housing Across Ontario Mid-sized Cities

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Executive Summary

Enrollment in higher educational institutions (HEI) has been steadily increasing across Canada, while on-campus accommodation provided by the HEI has plateaued. As a result, a majority of upper-year students now turn towards near-campus neighbourhoods for accommodation, displacing many long-term residents and occupying many low-income units. This process, by which residential neighbourhoods become dominated by student occupation, is known as studentification. Surprisingly, municipalities and HEIs collect little information about the locations of student dwellings. Fortunately, the Canadian Census does not clarify students living away from their parents' home as occupants of a dwelling, so we can assume that "unoccupied" dwelling units near an HEI are filled with students. This report estimates unoccupied dwellings as potential student dwellings to provide a picture of the geographies of studentification in eleven mid-sized university cites in Ontario.

This report addressed the following questions:

- 1. Has there been a decline in occupied dwelling units surrounding universities in mid-sized Ontario cities since 2006?
- 2. Are the changes in occupied dwelling units, population, and total units consistent throughout and between cities?
- 3. Is there a relation between the number of beds provided by the university and the changes seen in occupied dwellings?

Methods

Using Canadian census data, this report answered these questions by demonstrating a novel method to identify the spatial distributions of students at the census tract (CT) level. Although researchers in Canada cannot reliably identify student living accommodation distributions, the method developed in this report takes advantage of the Canadian Census definition for unoccupied dwellings to approximate the geographies of student accommodation at the CT level. Population and total dwelling units are also used as indicator variables. Newspaper articles, as well as visual clues taken from on-street images, were used to supplement findings from the quantitative analysis.

An increase in occupied units and total dwelling units paired with a decrease in population is indicative of a studentifying CT. The report studied eleven mid-sized census metropolitan areas (CMAs) in Ontario

that included at least one higher educational institution (HEI). Using this definition will allow researchers to approximate the geographies of studentification using free, publicly available data.

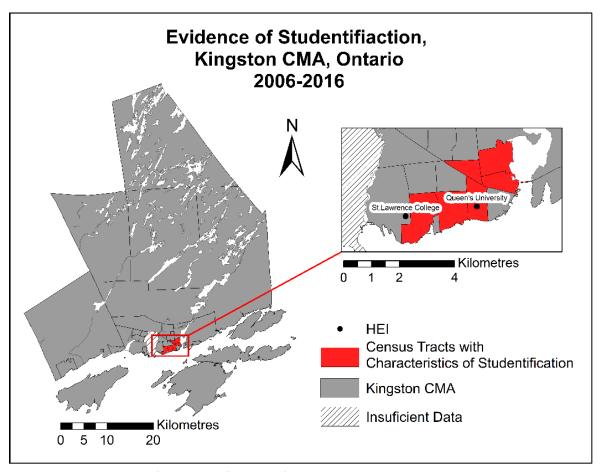


Figure 1: Sample map of evidence of studentification in the Kingston CMA

HEI Enrollment Data and Spatial Distribution of Studentified CTs

Enrolment growth over the period from 2006-2016 across all universities in this study averaged 28%. Furthermore, across all universities, on-campus student accommodation increases were not sufficient to meet the expansion in enrollment (see Table 1). This enrollment growth then becomes absorbed into surrounding communities thereby displacing long-term residents and increasing tensions with those remaining. A measure that was used to show the gap between student population and beds on campus was the ratio of students to beds. Nearly every school saw an increase in this ratio, meaning increases in enrollment outpaced increases in on-campus accommodation.

CTs showing characteristics of studentification were generally clustered around HEIs, with the CTs showing the largest signs of studentification close to universities. The Hamilton, Kingston, and London

CMAs showed the strongest patterns of studentification, with over 2500 units converting to student dwellings from 2006-2016. These CMAs in particular all had a single CT close to or containing the university that had high numbers of unoccupied units. There were also several CMAs where patterns of studentification were not as strong. The Oshawa, Peterborough, and Thunder Bay CMAs did not see a large conversion of units to unoccupied from 2006 to 2016. Colleges also seemed to influence studentification in the CTs surrounding them – the pattern is most visible in Mohawk College, in Hamilton and St. Lawrence College in Kingston. No positive relationship between university enrollment increases and the number of studentified units surrounding the HEI could be ascertained.

Greater Sudbury, Thunder Bay, and Windsor all saw population declines, which may have affected the accuracy of the results in these CMAs. The method may be capturing housing abandonment or foreclosures in these CMAs, highlighting the need for contextual analysis when applying this method. Another four CTs were found to be anomalous, all located next to Great Lakes, possibly alluding to the conversion of units to cottages or short-term rentals.

Recommendations & Limitations

Studentification often reshapes the fabric of neighbourhoods, removes low-income units from the dwelling stock, and disproportionally affects long-term residents. It is recommended that institutions and municipalities consider this method as a low-cost, easily accessible way to approximate the geographies of studentification to better predict where students are finding accommodation. Understanding the spatial distribution of students and their migration within cities is invaluable for planners and policymakers to develop policy in response to anticipated patterns in student accommodation locations.

There are certain limitations present in using this method, and its observations should be interpreted with caution. The method employed in the report is a working method and has not been thoroughly tested. This method should not be applied exclusively when studying the geographies of studentification. Different processes may present similar influences on the variables, as such a more nuanced approach should be taken when applying this method. Qualitative analysis should also be conducted to improve accuracy and validate results.

Table 1 Summary of Data collected on universities included in case studies.

СМА	University	Enrollment (2006)	Enrollment (2016)	University Growth (2006- 2016)	University Student Accommodation (number of beds)		Number of new beds on campus (2006-	Ratio of Students to Beds (2006)	Ratio of Students to Beds (2016)	Number of CTs Showing Studentification Characteristics		Estimated Units Converted (2006- 2016)	
					2006	2016	2016)	(2006)	(2010)	University Adjacent	Rest of City	University Adjacent	Rest of City
Greater Sudbury	Laurentian	8,726	9,603	877	1271	1507	236	6.9	6.4	2	5	354	462
Guelph	Guelph	21,656	28,748	7092	4625	4625	0	4.7	6.2	3	0	318	0
Hamilton	McMaster	24,265	30,368	6103	3686	3686	0	6.6	8.2	2	9	473	810
Kingston	Queen's	18,249	23,559	5310	3886	4436	550	4.7	5.3	5	1	1135	166
K-C-W	Wilfrid Laurier	14,275	17,880	3605	2495	2823	328	5.7	6.3	2	1	239	11
	Waterloo	25,910	36,665	10755	5724	5724	0	4.5	6.4				
London	Western	25,923	29,990	4067	4316	5303	987	6.0	5.7	4	7	872	510
Oshawa	Ontario Tech	4,299	9,931	5632	1320	1536	216	3.3	6.5	1	0	106	0
Peterborough	Trent	7,475	8,816	1341	1343	1523	180	5.6	5.8	0	2	0	157
St. Catharines	Brock	17,145	17,998	853	2407	2407	0	7.1	7.5	2	4	312	98
Thunder Bay	Lakehead	7,342	7,806	464	N/A	N/A	N/A	N/A	N/A	1	3	20	185
Windsor	Windsor	16,340	15,314	-1026	928	928	0	17.6	16.5	6	1	418	27